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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/439,807 11/12/99 MARCASE

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EXAMINER

VARMA, S.  
ART UNIT

PAPER NUMBER

*3*3711  
DATE MAILED:

03/01/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**Application No.  
09/439,807

Applicant(s)

Marcase

Examiner

Sneh Varma

Group Art Unit

3711

 Responsive to communication(s) filed on \_\_\_\_\_. This action is FINAL. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims** Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

 Claim(s) \_\_\_\_\_ is/are allowed. Claim(s) 1-20 is/are rejected. Claim(s) \_\_\_\_\_ is/are objected to. Claims \_\_\_\_\_ are subject to restriction or election requirement.**Application Papers** See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner. The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved. The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner.**Priority under 35 U.S.C. § 119** Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All  Some\*  None of the CERTIFIED copies of the priority documents have been received. received in Application No. (Series Code/Serial Number) \_\_\_\_\_. received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

 Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).**Attachment(s)** Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). 2 Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152**-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --**

Art Unit: 3711

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 19, and 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Mertens '113 (Mertens).

Mertens discloses a golf club head 10, ( Figures 1-7; Column 4, lines 31-54) comprising: a hosel 16, located at a heel 18, end to accommodate a shaft, and a metal blade comprising a striking face 22, , a sole, and a rear face, the striking face and the sole meeting at a knife-like leading edge 28, the sole having a protrusion running substantially parallel to the leading edge and located at the juncture of the sole and the rear face, the rear face meeting the striking face at a trailing edge 30; a shaft attached to the hosel 16, and having a handle positioned at an end opposite the hosel; and the striking face is abrasive (Column 9, lines 20-60).

3. Claims 1 and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Koehler '944 (Koehler).

Art Unit: 3711

Koehler discloses a golf club head 10, ( Figures 3a-3c; Column 3, lines 62-68; Column 4, lines 1-12) comprising: a hosel 14, located at a heel 32, end to accommodate a shaft, and a metal blade comprising a striking face 16, a sole 20, and a rear face, the striking face and the sole meeting at a knife-like leading edge 22, the sole having a protrusion running substantially parallel to the leading edge and located at the juncture of the sole and the rear face, the rear face meeting the striking face at a trailing edge 24; a shaft attached to the hosel 14, and having a handle positioned at an end opposite the hosel.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mertens in view of Sun et al. '041 (Sun) and Simmons '097 (Simmons).

Mertens discloses the invention as recited above, however, fails to disclose metal dowels. Sun teaches the use of metal dowels 16, (Column 2, lines 34-62). The diameter of these dowels 16, is between 0.375 inch and 0.4375 inch (Column 2, lines 53-62); and the metal dowel is made of a metal having a density greater than the density of the metal from which the metal blade is

Art Unit: 3711

formed (Column 2, lines 45-62); the metal dowel is made of lead and the club head is made of steel. Simmons teaches the use of a golf club head with metal dowel 30, (Column 3, lines 31-61) with diameter between 0.375 inch to 0.4375 inch and the use of tungsten, lead and other suitable metal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the metal dowels as taught by Sun and Simmons in Mertens device to improve the performance of the golf club head. For one of ordinary skill in the art the choice of designing the club head such that leading metal dowel and a trailing metal dowel disposed in the metal blade and located substantially on each side of an apex of the protrusion of the sole, the leading metal dowel disposed between the protrusion of the sole and the leading edge and the trailing metal dowel disposed between the protrusion of the sole and the trailing edge. would depend on the cost of manufacturing and the design requirements.

6. Claims 2-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koehler in view of Sun and Simmons.

Koehler discloses the invention as recited above, however, fails to disclose metal dowels. Sun teaches the use of metal dowels 16, (Column 2, lines 34-62). The diameter of these dowels 16, is between 0.375 inch and 0.4375 inch (Column 2, lines 53-62); and the metal dowel is made of a metal having a density greater than the density of the metal from which the metal blade is formed (Column 2, lines 45-62); the metal dowel is made of lead and the club head is made of steel. Simmons teaches the use of a golf club head with metal dowel 30, (Column 3, lines 31-61)

Art Unit: 3711

with diameter between 0.375 inch to 0.4375 inch and the use of tungsten, lead and other suitable metal. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the metal dowels as taught by Sun and Simmons in Koehler device to improve the performance of the golf club head. For one of ordinary skill in the art the choice of designing the club head such that leading metal dowel and a trailing metal dowel disposed in the metal blade and located substantially on each side of an apex of the protrusion of the sole, the leading metal dowel disposed between the protrusion of the sole and the leading edge and the trailing metal dowel disposed between the protrusion of the sole and the trailing edge. would depend on the cost of manufacturing and the design requirements.

7. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of Mertens or Koehler, as applied to claim 1 above, and further in view of Gordos '133 (Gordos) and Antonio us '668 (Antonio us).

Mertens and Koehler disclose the invention as recited above, however, fail to disclose that the knife -like leading edge is serrated. Gordos teaches the use of a golf club head with serrated 34a, sole 14, (Column 2, lines 12-65). Antonio us teaches the use of a golf club with serrated sole 204, (Figures 13 and 13a; Column 6, lines 53-65) with the distance between a pair of adjacent troughs of the knife-like leading edge is between 0.1875 inch and 0.250 inch. It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the use

Art Unit: 3711

of serrated sole as taught by Gordos and Antonio us in either Martens or Koehler device to improve the golf club head sole configuration as suggested by Antonio us (Column 1, lines 1-45).

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Varma whose telephone number is (703) 308-8335. The examiner can normally be reached on Monday to Friday from 8:00 A.M. - 4:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jeanette Chapman, can be reached on (703) 308-1310.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7768. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1078.

February 27, 2001

Sneh Varma, Patent Examiner

Art Unit 3711



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